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MF EXAMINER

ONUAKU, C

ART UNIT PAPER NUMBER

2615

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09/13/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|                              |                                       |                              |
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| <b>Office Action Summary</b> | Application No.<br><b>09/102,149</b>  | Applicant(s)<br><b>Okada</b> |
|                              | Examiner<br><b>Christopher Onuaku</b> | Art Unit<br><b>2615</b>      |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Jun 26, 2001

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 1835 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1, 3, 5-12, and 14-16 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1, 3, 5-12, and 14-16 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892) 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20)  Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on 6/26/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/102,149 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1,3,5-12&14-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,3,510&11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (US 4,982,390).

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Regarding claim 1, Tanaka disclose in Fig.1,2,4 a signal recording apparatus which, when instructed to start a signal recording, is capable of recording the necessary signal, comprising:

- a) a receiver receiving broadcast video image data (see Fig.1 and input terminal 1 with which an input signal Sin is supplied, such input signal as video or voice, which can be a telecast or radio broadcasting program ; col. 3, lines 35-43; and col.5, lines 64-67);
- b) a first storage unit storing the received broadcast video image data according a FIFO sequence (see Fig.1,3&4; temporary memory 4; col.3, line 35 to col.4, line 4; col.6, lines 27-37; and a disk memory as shown in Fig.2 may be used as memory 4);
- c) a second storage unit storing an indicated video image data in the stored received broadcast image data of the first storage unit ( see Fig.1, MAIN recorder 8; col.5, lines 1-38);
- d) indicating means for indicating the video image data to be played back ( see Fig.1, and input device 9; col.5, lines 1-38), here the user monitors the input signal through the monitor device 7 and sends an access command to controller 10 through input device 9 when confirming the part of the Sin he wants to save; the controller 10, upon receiving the access command causes the selected portion of the signal Sin to be displayed on monitor device 7 and recorded on the MAIN recorder 8;
- e) a control unit controlling the first storage unit so as to store the received broadcast video image, and for searching and reading the indicated video image data which have been stored in the first storage unit, and storing the indicated video image data in the second storage unit according to the indication of the indicating means (see Fig.1; controller 10; col.5, lines 1-38),

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here the user monitors the input signal through the monitor device 7 and sends an access command to controller 10 through input device 9 when confirming the part of the Sin he wants to save; the controller 10, upon receiving the access command causes the selected portion of the signal Sin to be displayed on monitor device 7 and the recorded on the MAIN recorder 8..

Regarding claim 3, Yuen discloses wherein the first storage unit stores broadcast video image data in a plurality of channels ( see at least col.7, lines 3-6; col.9, lines 27-32 and col.30, line 41 to col.31, line 47), here broadcast video signals are received for recording and reproducing from cable and television channels.

Regarding claim 5, Tanaka discloses wherein indicating means includes means for being operated by a user (see Fig. Input device 9; col.5, lines 1-12).

Regarding claim 10, Tanaka discloses wherein the first storage unit ( i.e., temporary memory 4 of Fig.1&4) comprises a disk storage unit (see col.3, lines 60-64).

Regarding claim 11, Tanaka discloses wherein the second storage unit ( i.e., MAIN recorder 8 of Fig.1) comprises a disk storage unit (see col.3, lines 52-55).

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Browne et al (WO 92/22983).

Regarding claim 3, Tanaka fails to disclose wherein the first storage unit stores broadcast video image data in a plurality of channels which broadcast at a same time. Browne et al teach a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or to record selected ones of the plurality of input signals comprising multi-input connections, each of which may receive an input signal 101a-101f from the air and ground based broadcast sources, cable feeds, or digital distribution sources. The multi-source recorder player 100 can receive and process through multi-channel sources compressed digital signals 101g and 101h. Receiving compressed signals expands the signal handling and storage capacity of the multi-source recorder player 100. Once signals are input, the multi-source recorder player 100 can simultaneously record, process, route, and display the plurality of input video and/or audio signals (see Fig.1; page 6, at least lines 1-12). Storing broadcast video image data in a plurality of channels which broadcast at a same time provides the desirable advantage of expanding the signal handling and

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record capacity of a multi-source recorder player, for example. It would have been obvious to modify Tanaka by realizing Tanaka with a multi-source recorder means that can store broadcast video image data in a plurality of channels which broadcast at a same time, as taught by Browne, since this provides the desirable advantage of expanding the signal handling and record capacity of a multi-source recorder player, for example

7. Claims 6,12&14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Yuen et al US 5,488,409).

Regarding claim 6, Tanaka fails to disclose wherein the indicating means comprises means for determining the video image data to be played back from a list of information indicative of how video image has been recorded by a user. Yuen et al teach an automatic monitoring of the operation of a video cassette recorder including a menu which includes a list of user program options from which a user can select a desired program (col. 14, line 50 to col.15, line 15; and col.37, line 19 to col.39, line 17). Providing program menu which includes a list of programs from which a user can select a desired program helps to facilitate program selection process by reducing the time for selecting a desired program. It would have been obvious to modify Tanaka by realizing Tanaka with the means to provide program menu which includes a list of programs from which a user can select a desired program, as taught by Yuen, since this helps to facilitate program selection process by reducing the time for selecting a desired program.

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Regarding claim 12, Tanaka discloses:

a) a first storage unit storing the received broadcast video image data according a FIFO sequence (see Fig.1,3&4; temporary memory 4; col.3, line 35 to col.4, line 4; col.6, lines 27-37; and a disk memory as shown in Fig.2 may be used as memory 4);

b) a second storage unit storing an indicated video image data in the stored received broadcast image data of the first storage unit ( see Fig.1, MAIN recorder 8; col.5, lines 1-38);

c) a control unit controlling the first storage unit so as to store the received broadcast video image, and for searching and reading the indicated video image data which has been stored in the first storage unit, and storing the indicated video image data in the second storage unit at a time indicated for recording (see Fig.1; controller 10; col.5, lines 1-38), here the user monitors the input signal through the monitor device 7 and sends an access command to controller 10 through input device 9 when confirming the part of the Sin he wants to save; the controller 10, upon receiving the access command causes the selected portion of the signal Sin to be displayed on monitor device 7 and the recorded on the MAIN recorder 8.

Tanaka fails to disclose a random-access storage unit (Yuen further teaches in Fig.1 a directory memory controller including random access memory (RAM) 33. Random access storage unit provides the desirable advantage of providing random access capability to the data stored in a RAM memory during, for example, the reproduction process, thereby making the reproduction process faster. It would have been obvious to modify Tanaka by realizing Tanaka with a random access storage unit, as taught by Yuen, since this provides the desirable advantage of providing

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random access capability to the data stored in a RAM memory during, for example, the reproduction process, thereby making the reproduction process faster.

Regarding claim 14, Yuen further teaches wherein the random access storage unit comprises a disk storage unit (see Fig. 1 and RAM 33 of Yuen, col.15, lines 16-23 and col.21, lines 61-65). It would have been to change the first random access unit to a disk storage unit, again, as taught by Yuen, in order to provide, for example, an alternative storage means.

Regarding claim 15, Tanaka fails to disclose wherein the control unit has a storage management table for storing storage addresses of each broadcast image data stored in the random-access storage unit, and wherein the control unit searches the indicated video image data by referencing the storage management table Yuen further teaches the guide menu which contains the title and descriptions of the video section and VBI contains locations of each cell of the grid and the start address and end address for the corresponding video sections, Table IV which shows information contained in the VBI ( col.22, lines 36-56; col.37, lines 19-49); and BVI decoder in the indexing VCR 10 continuously decodes the channel specific guide from the VBI and stores it in the RAB 33; and in col.37, line 66 to col.39, line 66 and specifically col.38, lines 39, teaches searching the video image data by referencing the storage management table.

Storing management table containing addresses of each broadcast image data in the random access unit and searching the indicated video image data by referencing the storage

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management table provides the desirable advantage of facilitating program searching process by reducing program searching time during reproduction.

It would have been obvious to modify Tanaka by realizing Tanaka with the means for storing management table containing addresses of each broadcast image data in the random access unit and searching the indicated video image data by referencing the storage management table, as taught by Yuen, since provides the desirable advantage of facilitating program searching process by reducing program searching time during reproduction.

Regarding claim 16, Tanaka discloses indicating means for indicating the video image data to be recorded ( see Fig.1, and input device 9; col.5, lines 1-38), here the user monitors the input signal through the monitor device 7 and sends an access command to controller 10 through input device 9 when confirming the part of the Sin he wants to save; the controller 10, upon receiving the access command causes the selected portion of the signal Sin to be displayed on monitor device 7 and recorded on the MAIN recorder 8;

8. Claims 7,8&9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Yuen '409 in view of Yuen et al ( US 5,335,079).

Regarding claim 7, Tanaka and Yuen '409 fail to explicitly disclose wherein the indicating means comprises means for determining video image data which is recorded with highest probability in the list as the video image data to be played back. Yuen '079 teaches the timer

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preprogramming feature of video cassette recorders (VCRs) and to an apparatus and method for using encoded information to shorten the time required to perform timer preprogramming wherein in performing timer preprogramming, the channel, date, time and length of a program are prioritized in order to determine the proper ordering of programs. For example, in channel prioritization, most frequently used channels have a low priority number ( see col.9, line 24 to col.11, line 22). It would have been obvious to one of ordinary skill in the art to further modify Tanaka by applying the principle of prioritizing programs, as taught by Yuen '079, in order, for example, to determine the proper ordering of programs. With Tanaka modified with Yuen '079, it would have been obvious to apply the prioritizing principle in the program list in the menu now added to Tanaka in order to determine the proper ordering of programs in the menu.

Regarding claims 8&9, Tanaka and Yuen '409 further fail to disclose wherein the indicating means comprises means for updating the list and placing video image data which has been recorded most recently in a location of highest priority in the list. Yuen '079 further teaches a stack memory 76, wherein if a first program is entered, it is placed at the top location of the stack memory. If there are already programs in the stack memory, the newly entered program will first be provisionally placed at the bottom of the stack memory. The stack memory will then be sorted into the correct temporal order so that the earliest program in time will appear in the top location and the last program in time will be at the bottom ( see col.18, lines 11-65).

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Placing the newest recorded image data at the top location in a storage means with the highest priority, during storage means update operation, would, for example, serve as a reminder to the user that the video image at the top of the list is the most current video image.

It would have been obvious to further modify Tanaka by realizing Tanaka with the means to place the most recently recorded data, during storing update, at the top location of the storing means with the highest priority, as taught by Yuen '079, in order, for example, to serve as a reminder to the user that the video image at the top of the list is the most current video image.

With Yuen '409 now modified with Yuen '079, it would have been obvious to place the most recently recorded video image data at the top of the list with the highest priority, when updating the list, which would, for example, serve as a reminder to the user that the video image at the top of the list is the most current video image.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

**Any response to this action should be mailed to:**

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**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be direct  
to the Group receptionist whose telephone is (703) 305-4700.

COO

9/6/01

*Christopher O. Onuaku*  
CHRISTOPHER O. ONUAKU  
PATENT EXAMINER